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Appl. No. 10/666,348
Reply to Office Action of September 18, 2003

REMARKS

This case has been carefully considered in light of the Office Action dated December 29, 2004. The specification has been modified to comply with MPEP §608.01(b) to overcome the examiner's objections. The first paragraph appearing on page 10 has been modified by replacing the word "comprising" with "includes" to conform to the standard format of writing the abstract in a patent application.

Claims 1 - 37 remain pending in this application. Of these, claims 9-19 and 26-37 are withdrawn and claims 1- 8 and 20 - 25 are rejected. In this amendment, claims 1, 2, 3, 8, 20, 21, 22 and 25 have been amended. No new matter has been added. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Election/Restriction

Applicants maintain that Examiner's restriction requirement is improper. Notwithstanding Applicants' position, claims 1-2 and 20-21 were indicated as being generic. Applicants assume that upon allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species (including those of withdrawn claims) which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Rejection under 35 U.S.C. §102

Claims 1 - 4, 6, and 20 - 23 are rejected under 35 USC 102(b) as being anticipated by Marron et al. (US 4,093,435). Applicants respectfully traverse this rejection.

Independent claims 1 and 20 have been amended to more clearly describe the 'core' as a 'magnetic core'. In particular, amended claim 1 now recites the apparatus for induction heating includes a plurality of heat transfer plates, each of said heat transfer plates being disposed radially with respect to a magnetic core axis and a plurality of magnetic core sections disposed between respective pairs of said heat transfer plates and shaped to form a cylindrical magnetic core assembly.

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Similarly, amended claim 20 now recites the method of making an apparatus for induction heating includes disposing a plurality of heat transfer plates radially with respect to a magnetic core axis and disposing a plurality of magnetic core sections between respective pairs of said heat transfer plates, said magnetic core sections being shaped to form a cylindrical magnetic core assembly.

Applicants submit that Marron does not teach, suggest or disclose each and every element of Applicants' amended independent Claims 1 and 20. In particular, Marron relates to thermal systems and specifically, to a rotary regenerative total heat energy exchanger (e.g. having an asbestos-free heat exchange media formed by spirally winding flat and corrugated webs of aluminum foil and/or fully bleached, 45 lb. Kraft paper constituted by 84% fibres and 16% salts). In particular, Marron teaches heat exchangers in the form of a 'wheel' that is used to recover heat and moisture from relatively higher temperature exhausted air for transfer to a cool, dry incoming air stream, and also to cool and dehumidify a hot, moist incoming air stream by extracting moisture and heat energy and transferring the energy to a relatively cooler and drier exhaust air stream such as in an air conditioned building or similar place (column 1, lines 38 - 45). The heat transfer plates, the core and core sections in Marron do not have any electrical or magnetic attribute and they are disposed merely to circulate heat by means of either conduction and/ or convection and/ or radiation and thereby achieve better thermal management of the heat exchangers disclosed.

Claims 1 - 4, 8, 20 - 22 and 25 are rejected under 35 USC 102(b) as being anticipated by Fischer, Jr. et al. (US 4,769,053). Applicants respectfully traverse this rejection. Specifically, Applicants submit that Fischer does not teach, suggest or disclose each and every element of Applicants' amended independent claims 1 and 20. In particular, Fischer relates to thermal systems and specifically, to a sensible and latent heat exchange media that includes a gas permeable matrix. The gas permeable matrix is formed of a sensible heat exchange material that is capable of absorbing sensible heat from a warm air stream and releasing the absorbed sensible heat into a cool air stream as the air streams flow through the sensible and latent heat exchange media (column 3, lines 13 - 18). In particular, Fischer teaches heat transfer plates, a core and core sections that merely circulate the heat by means of either conduction and/ or convection

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and/ or radiation and facilitates exchange of abovementioned heat. The heat transfer plates, the core and core sections in Fischer do not have any electrical or magnetic attribute and they are disposed merely to circulate heat by means of either conduction and/ or convection and/ or radiation and thereby achieve better thermal management of the heat exchangers disclosed.

Claims 1 - 3, and 20 - 22 are rejected under 35 USC 102(b) as being anticipated by Johnson et al. (US 5,871,359). Applicants respectfully traverse this rejection. Specifically, Applicants submit that Johnson does not teach, suggest or disclose each and every element of Applicants' amended independent claims 1 and 20. In particular, Johnson relates to thermal systems and specifically to a rotary valve thermal oxidizer including an interfacial seal disposed between rotating and fixed valve portions to prevent the mixing of treated and untreated gas streams. In particular, Johnson teaches a gas stream distribution assembly that includes a fixed plenum having an untreated gas stream inlet, a treated gas stream outlet and a rotating plenum disposed between the fixed plenum and the heat exchanger. The rotating plenum permits the conveyance of the untreated gas stream from the inlet to selective heat exchanger segments, and also permits the conveyance of the treated gas stream from other selective heat exchanger segments to the outlet (column 2, lines 26 - 35). The heat transfer plates, the core and the core sections in Johnson do not have any electrical or magnetic attribute and they are disposed merely to circulate heat by means of either conduction and/ or convection and/ or radiation and thereby achieve better thermal management of the heat exchangers disclosed.

Moreover, neither Marron, Fischer or Johnson teach any recited feature of "induction heating", nor do they provide any motivation or suggestion to one ordinarily skilled in the art on how an electrical or magnetic system may be obtained from the disclosure of the "heat exchangers" in the respective references. Furthermore, since Marron, Fischer and Johnson, whether taken alone or in combination, fail to teach or suggest an electrical or a magnetic system, they cannot be said to teach or suggest "induction heating" which is based on both an electrical and a magnetic system. As such, Marron, Fischer and Johnson do not disclose every element of Applicants' invention as recited in claims 1 and 20. Therefore, for at least the above stated reasons, Applicants submit that independent claims 1 and 20 are not anticipated by Marron, Fischer or Johnson taken alone or in combination.

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Since claims 2-4, 6, 8, 21-23 and 25 depend directly or indirectly from claims 1 and 20, Applicants submit claims 2-4, 6, 8, 21-23 and 25 are similarly not anticipated by Marron, Fischer or Johnson for at least the reasons set forth above. Accordingly, withdrawal of the rejections under 35 USC 102(b) of claims 1 - 4, 6, 8, 20 - 23 and 25 as being anticipated by one or more of Marron, Fischer or Johnson is respectfully solicited.

Rejection under 35 U.S.C. §103

Claims 5, 7 and 24 are rejected under 35 USC 103(a) as being unpatentable over Marron in view of Hattori et al. (US 5,941,302), and claims 5 - 7, 23 - 24 are rejected under 35 USC 103(a) as being unpatentable over Fischer in view of Kramer et al. (US 2004/0250999).

Applicants believe each of the independent claims 1 and 20 to be allowable over Marron for at least the reasons discussed above with reference to the rejection under 35 USC 102. Specifically, Applicants' claims 1 and 20 recite a magnetic core axis and a plurality of magnetic core sections, which are not taught by Marron. Applicants respectfully submit that Hattori does not overcome the above noted deficiency of Marron and, as a result, the applied combination of references fails to teach, suggest, or disclose all elements of the independent claims recited in the present application.

Likewise, Applicants believe each of the independent claims 1 and 20 to be allowable over Fischer for at least the reasons discussed above with reference to the rejection under 35 USC 102. Applicants respectfully submit that Kramer does not overcome the above noted deficiency of Fischer and, as a result, the applied combination of references fails to teach, suggest, or disclose all elements of the independent claims recited in the present application.

Each of the rejected dependent claims 5, 6, 7, 23, 24 depend from an independent claim which Applicants believe to be in condition for allowance over any combination of one or more of Marron, Hattori, Fischer and Kramer. references for the reasons discussed above. More specifically, claims 5, 6, 7 depend directly from claim 1, and claims 23, 24 depend directly from claim 20. Applicants respectfully submit that claims 1 and 20 are patentably distinct from the applied references for the reasons discussed above and that claims 5, 6, 7, 23, 24 are similarly

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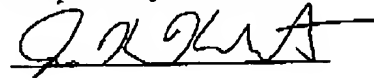
allowable over the applied references based at least upon on their dependency. It is respectfully requested that the rejections be withdrawn.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,



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